

# UNITED STATE DEPARTMENT OF COMMERCE Patent and Trademark Office

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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR |   | *            | ATTORNEY DOCKET NO. |
|--|-------------|----------------------|---|--------------|---------------------|
| 09/202,267   | 12/09/98    | NISHIKAWA            |   | Т            | P3297B              |
| 020178   |             | QM12/1002            | _ |              | EXAMINER            |
| EPSON RESEARCH AND DEVELOPMENT INC                           |             |                      |   | TUGBANG, D   |                     |
| INTELLECTUAL PROPERTY DEPT 150 RIVER OAKS PARKWAY, SUITE 225 |             |                      |   | ART UNIT     | PAPER NUMBER        |
| SAN JOSE CA 95134  |             | 41, OULIE EEU        |   | 3729         | 17                  |
|  |             |                      |   | DATE MAILED: | 10/02/00            |

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

## g Office Action Summary

Application No. 09/202,267

A. Dexter Tugbang

Applicant(s)

Examiner

Group Art Unit

Nishikawa et al

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| Responsive to communication(s) filed on   |   |  |  |  |  |  |
|---|---|--|--|--|--|--|
| This action is <b>FINAL</b> .   |   |  |  |  |  |  |
| Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11; 453 O.G. 213.               |   |  |  |  |  |  |
| A shortened statutory period for response to this action is set to $\epsilon$ is longer, from the mailing date of this communication. Failure to application to become abandoned. (35 U.S.C. § 133). Extension 37 CFR 1.136(a). | respond within the period for response will cause the |  |  |  |  |  |
| Disposition of Claims   |   |  |  |  |  |  |
|   | is/are pending in the application.                    |  |  |  |  |  |
| Of the above, claim(s)  | is/are withdrawn from consideration.                  |  |  |  |  |  |
| Claim(s)  |   |  |  |  |  |  |
| Claim(s)  |   |  |  |  |  |  |
| Claim(s)  |   |  |  |  |  |  |
|   |   |  |  |  |  |  |
| Application Papers  |   |  |  |  |  |  |
| ☐ See the attached Notice of Draftsperson's Patent Drawing F  | Review, PTO-948.                                      |  |  |  |  |  |
| ☐ The drawing(s) filed on is/are objected   | d to by the Examiner.                                 |  |  |  |  |  |
| ☐ The proposed drawing correction, filed on   | is approved disapproved.                              |  |  |  |  |  |
| ☐ The specification is objected to by the Examiner.   |   |  |  |  |  |  |
| $\square$ The oath or declaration is objected to by the Examiner.   | •   |  |  |  |  |  |
| Priority under 35 U.S.C. § 119  |   |  |  |  |  |  |
| Acknowledgement is made of a claim for foreign priority un  | ider 35 U.S.C. § 119(a)-(d).                          |  |  |  |  |  |
| ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the   | he priority documents have been                       |  |  |  |  |  |
| ☐ received.   |   |  |  |  |  |  |
| $\square$ received in Application No. (Series Code/Serial Number  | er)   |  |  |  |  |  |
| $\square$ received in this national stage application from the In   | ternational Bureau (PCT Rule 17.2(a)).                |  |  |  |  |  |
| *Certified copies not received:   |   |  |  |  |  |  |
| ☐ Acknowledgement is made of a claim for domestic priority in   | under 35 U.S.C. § 119(e).                             |  |  |  |  |  |
| Attachment(s)   |   |  |  |  |  |  |
| ☐ Notice of References Cited, PTO-892   |   |  |  |  |  |  |
| ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s   | s)  |  |  |  |  |  |
| Interview Summary, PTO-413  |   |  |  |  |  |  |
| ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948   |   |  |  |  |  |  |
| ☐ Nótice of Informal Patent Application, PTO-152  |   |  |  |  |  |  |
|   |   |  |  |  |  |  |
|   |   |  |  |  |  |  |
| SEE OFFICE ACTION ON THE  | · FOLLOWING PACES                                     |  |  |  |  |  |

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#### **DETAILED ACTION**

#### Election/Restrictions

1. This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The Grouped Species are as follows.

### Group I

Species A drawn to Figure 2;

Species B drawn to Figures 3 and 4.

Group II, drawn to stripping from the green sheet by:

Species C, forming a recess in the relief pattern on the green sheet;

Species D, forming a stripping layer on the green sheet;

Species E, irradiating light onto an interface between the green sheet and head base.

Group III, drawn to forming the nozzle port by:

Species F, a lithographic method;

Species G, a laser beam;

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Species H, an ion beam; or

Species I, through discharge fabrication.

Applicant is required, in response to this action, to elect <u>one single species from each</u>

Group to which the claims shall be restricted if no generic claim is finally held to be allowable.

The response must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

2. The claims are deemed to correspond to the species listed above in the following manner:

Species A drawn to Claims 2-4 and 19-20;
Species B drawn to Claims 5 and 21;

Species C drawn to Claims 10 and 26;

Species D drawn to Claims 11 and 27;

Species E drawn to Claims 12, 13, 28 and 29;

Species F drawn to Claims 14 and 30;

Species G drawn to Claims 15 and 31;

Species H drawn to Claims 16 and 32; and

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Species I drawn to Claims 17 and 33.

The following claim(s) are generic: 1, 6-9 and 22-25.

3. The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons:

Within Group I;

Species A lacks the corresponding technical feature of a second green sheet required by Species B. Species B lacks the corresponding technical feature of removal of the resist layer required by Species A.

Within Group II;

Species C lacks the corresponding technical features of stripping the green sheet by 1) the use of a stripping material required by Species D and 2) irradiation of light required by Species E;

Species D lacks the corresponding technical features of stripping the green sheet by 1) forming a recess in the relief pattern of the green sheet required by Species C, and 2) irradiation of light required by Species E; and

Species E lacks the corresponding technical features of stripping the green sheet by 1) forming a recess in the relief pattern of the green sheet required by Species C, and 2) the use of a stripping material required by Species D.

Within Group III;

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Species F lacks the corresponding technical features of forming the nozzle port by 1) a laser beam required by Species G, 2) an ion beam required by Species H, and 3) discharge fabrication required by Species I;

Species G lacks the corresponding technical features of forming the nozzle port by 1) a lithographic method required by Species F, 2) an ion beam required by Species H, and 3) discharge fabrication required by Species I;

Species H lacks the corresponding technical features of forming the nozzle port by 1) a lithographic method required by Species F, 2) a laser beam required by Species G, and 3) discharge fabrication required by Species I; and

Species I lacks the corresponding technical features of forming the nozzle port by 1) a lithographic method required by Species F, 2) a laser beam required by Species G, and 3) an ion beam required by Species H.

- 4. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).
- 5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dexter Tugbang whose telephone number is (703) 308-7599.

**LEE YOUNG** 

SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 3700

ADT

October 1, 2000